

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant: Michael Kilian et al.
Serial No.: 10/731,790
Confirmation No.: 4910
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For: METHOD AND APPARATUS FOR DATA RETENTION IN A
STORAGE SYSTEM
Examiner: J. D. Wong
Art Unit: 2168

REQUEST FOR RECONSIDERATION

Mail Stop Amendment
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Office Action of August 8, 2007, Applicants respectfully request reconsideration. To further the prosecution of this application, each of the rejections set forth in the Office Action has been carefully considered and is addressed below. The application as presented is believed to be in condition for allowance.

Rejections Under 35 U.S.C. §101

The Office Action rejects claims 70-78 under 35 U.S.C. §101, asserting that these claims are directed to nonstatutory subject matter. Applicants respectfully traverse this rejection.

Claims 70-74 are directed to at least one computer-readable medium encoded with instructions that, when executed on a computer system, perform a specified method.

MPEP §2106.01 states, “computer programs claimed as computer listings *per se*, i.e., the descriptions or expressions of the programs, are not physical ‘things.’ They are neither computer components nor statutory processes, as they are not ‘acts’ being performed. Such claimed computer

programs do not define any structural and functional interrelationships between the computer program and other claimed elements of a computer which permit the computer program's functionality to be realized. **In contrast, a claimed computer-readable medium encoded with a computer program is a computer element which defines structural and functional interrelationships between the computer program and the rest of the computer which permit the computer program's functionality to be realized, and is thus statutory (emphasis added)."**

As discussed above, claims 70-74 recite at least one computer-readable medium encoded with instructions that, when executed on a computer system, allow the instructions' functionality to be realized. Thus, these claims are statutory and it is respectfully requested that the rejection of these claims under 35 U.S.C. §101 be withdrawn.

With respect to claims 75-78, the Office Action asserts that the element of a host can be interpreted as a "spooler," which the Office Action asserts is a software program that initiates and controls spooling, and asserts that the term "storage device" can be interpreted to be a software program. The Office Action thus asserts that "reasonable doubt is raised as to whether the standard definition is inclusive of software *per se*." Applicants respectfully disagree with these interpretations of the terms "host" and "storage device," and disagree that claims 75-78 are directed to software *per se*.

MPEP §2106.01 states, "[d]escriptive material can be characterized as either 'functional descriptive material' or 'nonfunctional descriptive material.' In this context, 'functional descriptive material' consists of data structures and computer programs which impart functionality when employed as a computer component....'Nonfunctional descriptive material' includes but is not limited to music, literary works, and a compilation or mere arrangement of data. Both types of "descriptive material" are nonstatutory when claimed as descriptive material *per se*."

Each of the rejected claims is directed to a storage system that comprises a storage device and at least one controller. Because both of these elements are hardware elements, the claim is not directed to descriptive material *per se*. That is, a storage device is a device that comprises a physical storage medium for storing data.

Moreover, as stated in Applicants' specification at page 24, lines 11-21, "[t]he above described embodiments of the present invention can be implemented in any of numerous

ways....When implemented in software, the software code can be executed on any suitable processor or collection of processors, whether provided in a single computer or distributed among multiple computers. It should be appreciated that any component or collection of components that perform the functions described above can be generically considered as one or more controllers that control the above-discussed functions. **The one or more controllers can be implemented in numerous ways, such as with dedicated hardware, or with general purpose hardware** (e.g., one or more processors) that is programmed using microcode or software to perform the functions recited above (emphasis added).

Each of the claims 75-78 is directed to a storage system that includes a storage device and at least one controller that performs one or more actions. Thus, these claims are not directed to a data structure or computer program, but rather are directed to a hardware system with hardware components.

Each of these claims is thus directed to statutory subject matter and it is respectfully requested that the rejection of these claims under 35 U.S.C. §101 be withdrawn.

Rejections Under 35 U.S.C. §103

The Office Action rejects claims 65-78 under 35 U.S.C. §103(a) as purportedly being obvious over Stuart (2005/0055519) in view of Cossey (2005/0070622). Applicants respectfully traverse this rejection.

Each of independent claims 65, 70, and 75 relates, in one way or another, to the retention period for a unit of content being stored in the content of the unit of content, the request to delete the unit of content identifying the unit of content using a content address generated, at least in part, from at least a portion of the unit of content, and the portion of the unit of content used in generating the content address including the retention period.

The Office Action concedes that Stuart does not disclose these limitations, but asserts that Cossey discloses this limitations at ¶0032 and ¶0052. Applicants respectfully disagree.

Cossey is directed to simplifying the task of "copying" data from one application program and "pasting" it in another application program (¶0019). As shown in Figure 1, Cossey discloses a technique by which information may be copied from one application program and automatically

prepared, formatted, and pasted into another application program, without the user have to exit the current application program, open the destination application program, paste the copied text, and reformat it (§§0020-0031; Figure 1).

At §0032, Cossey discloses that once the destination for text selected by the user has been determined, and the this destination has been prepared and the selected text has been formatted, the selected text can be posted (i.e., pasted in the target destination). Cossey discloses that unlike a “move” operation, this “copy” operation does not alter the text selected at the source location.

This paragraph does not say anything about including a retention period for a unit of content in the content of the unit of content, or identifying the unit of content using a content address generated, at least in part from at least a portion of the unit of content, wherein the portion of the unit of content used in generating the content address includes the retention period.

Figure 2 shows a graphical user interface 200 with a “paste where” menu item that, when selected, prompts a user to enter a target destination at which the selected text is to be pasted (§0033). Selection of the “paste where” menu item causes a popup 215 to be displayed in which a user may enter a target destination in box 225 or select a target destination from a list 220 of predefined target destinations (§§0037-0038; §0042; Figure 2).

Figure 4 shows a graphical user interface (GUI) 400 that is used to configure which items (and how many items) are displayed in the predefined target destination list in Figure 2 (§0049). One option that may be specified via Figure 4 is to keep the most frequently used destinations in the predefined target destination list (§0051). In addition, GUI 400 includes a history retention section 425 that allows a user to specify a duration for retaining information used to populate the predefined target destination list.

At §0052, Cossey discloses that if, for example, a most frequently used list mechanism is utilized for determining predefined target destinations, a user specifying three days in the history retention section 425 restricts a set of recorded target destinations to those occurring within the last three days. Similarly, the clear history button 430 causes a system to delete presently stored information tracked by the system relating to dynamically populating predetermined target destination lists.

Cossey does not disclose storing a retention period in a content unit that has a content address, generated from at least a portion of the content of the content unit, wherein the at least a portion of the content of the unit of content includes the previously-defined retention period.

Although Cossey discloses a GUI 400 in which the user may specify a period of time to keep a target destination in the predefined target destination list (which may be cleared at any time by selecting button 430), Cossey does not even mention the use of content addresses. That is, in Cossey, there is no identifier for a unit of content that is computed, at least in part, from the content of the unit of content.

As should be clear from the discussion above, Cossey does not disclose or suggest a retention period for a unit of content being stored in the content of the unit of content, a request to delete the unit of content identifying the unit of content using a content address generated, at least in part, from at least a portion of the unit of content, or the portion of the unit of content used in generating the content address including the retention period. Thus, each of independent claims 65, 70, and 75 patentably distinguishes over Stuart and Cossey, whether taken alone or in combination. Accordingly, it is respectfully requested that the rejection of these claims under 35 U.S.C. §103(a) be withdrawn.

Claims 66-69 depend from claim 65, claims 71-74 depend from claim 70, and claims 76-78 depend from claim 75. Each of these claims is patentable for at least the same reasons as its respective independent claim. Accordingly, it is respectfully requested that the rejection of these claims be withdrawn.

